

IN THE SPECIFICATION

Page 1, line 1, please insert the following:

TITLE OF THE INVENTION

Page 1, line 2, please amend as follows:

DESCRIPTION BACKGROUND OF THE INVENTION

(1) Field of the InventionTECHNICAL FIELD

After page 1, line 15, please insert the following:

(2) Description of Related Art

After page 3, line 11, please insert the following:

BRIEF SUMMARY OF THE INVENTION

After page 4, line 20, please insert the following:

BRIEF DESCRIPTION OF THE DRAWINGS

In order to facilitate the understanding of the present invention, the description of the disclosed invention will be provided with reference to the embodiments illustrated in the appended drawings or figures, wherein like structures are identified with like reference designations. The invention will be described and explained with additional specificity and detail by the use of the accompanying drawings, wherein:

FIG. 1 illustrates an overall view of an embodiment of the invention in use;

FIG. 2 illustrates a perspective view of the device illustrated in FIG. 1;

FIG. 3 illustrates details of a feeler of the instant invention with respect to other elements near to the device shown in FIG. 1;

FIG. 4 illustrates an overall view of another embodiment of the invention in use; and

FIG. 5 illustrates a perspective view of the device illustrated in FIG. 4.

DETAILED DESCRIPTION OF THE INVENTION

Page 4, line 22 through page 5, line 7, please amend the paragraph as follows:

Two fairly different realizations of the device are described hereunder using the following figures. The first figures 1, 2 and 3 illustrate therefore the first realization mode, and the last figures 4 and 5 another mode. The first realization mode applies notably to the control of the blade groove profiles or other deep honeycomb cells on a compressor hub or turbine disk. Please refer first of all to figure 1 which is an overall view of the device in action. ~~The disk and the blades bear the references 1 and 2; the~~ The disk 1 is mounted on a machining mandrel 3 in a known position. The cutting tool has been adjusted as accurately as possible and has carried out a run in one of the grooves 2, of a blade which is now to be checked using the device. According to the control results of the groove 2, machining of the other grooves 2 could follow, or on the contrary, the tool will be adjusted again.

Page 7, line 4 through page 8, line 7, please amend the paragraph as follows:

The processing unit 7 comprises besides, but on the device, a control knob 28 allowing the start of memory storage of the signals from the optical encoders 21 and 22, or on the contrary the temporary stoppage of these signals. Thus the processing unit 7 is only really active to receive and process these measurements on command from the operator, in practice when the profile to be measured is felt. The displacements other than from the feeler 4, such as erratic displacements between 2 measurements of portions of measurement, are

however read so as to continue to have knowledge of the position of the feeler 4. The measurement can thus be interrupted and started again later. This is important in the case under study of the grooves 2. We will now discuss figure 3 which gives details of the feeler 4 and the elements near to the device. As we have mentioned, the rod 8 is bent at an angle and at first travels in a sideways direction, then in the other after a straight portion 29. Furthermore, the straight portion 29 is mounted on a shaft 30 as an extension. The shaft 30 turns in the first carriage 10 around bearings 31; a manual rotation is made possible by a knob 32 extending from the first carriage 10 at the opposite end of the feeler 4; a clamping screw 33 facilitates keeping the feeler 4 in an invariable angle position. In practice two angle positions will be preferred and defined by thrust bearings of a stop 34 mounted on the shaft 30 extending radially on a pair of slugs 35 and 36 projecting from the first carriage 10 in the direction of the rod 8. The two stop positions are diametrically opposed. They are suitable respectively for the two halves of the profile of the groove 2, the elbow of the rod 8 being fairly significant to avoid any contact with the edges 37 of the neck 38 of the groove 2.

Page 9, line 4 through page 10, line 6, please amend the paragraph as follows:

A measurement standard 39 (figure 2) can be added to the device to check its precision or the capabilities of the operator. The measurement standard itself also comprises complementary means identical to those of the mandrel 3 to hold the device in a particular position such as, for example, a honeycomb cell 40 where the profile slightly resembles the profile to be measured, without the similarity being really necessary. The operator recognizes the profile of the honeycomb cell 40 as in an ordinary measurement, and the processing unit 7 compares the results with the real profile, recorded previously. In this way the operator receives an indication of the accuracy of his work. It is possible to compensate for an excessive manipulation force, producing deformation, or wear of the ball 9 by

calculating the average errors on each side of the honeycomb cell 40 and by subtracting these figures from the measurements obtained on the profile to be measured. A cause for uncertainty is in practice the penetration of the stops 18 and 19; comparators 41-141 can be mounted on the brackets of the shank 15 adjacent to the stops to check just the right penetration of the support 5, in other words the beginnings of sensitivity of the comparators 41-141 when the travel stop has been set, but without appreciable movement of the rod of the comparators 41-141. An interesting aspect of the invention is that the feeler 4 maintains its invariable and known directions and that poorly distributed wear of the ball 9 could be compensated for by an exact value for each portion of measurement due to the calibration and knowledge of the portion of ball 9 sliding on each portion of the profile of the part 1 as indeed of the profile of the measurement standard 39.

Page 10, lines 7-10, please amend the paragraph as follows:

A case 52 (figure 1) surrounds the feeler 4 when the device is screwed in once again so as to provide protection; the feeler is retained on a screw thread 43-143 at the base of the rod 8.

Please amend the abstract on page 15 as shown on the following page.